

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for assessing endothelial function, comprising:

- a. providing a vasodilating stimulant to a patient ~~to stimulate and thereby stimulating~~ hemodynamic activity in a selected region of the patient's body;
- b. monitoring a change in a hemodynamic parameter at the selected region ~~as a consequence of the vasodilating stimulant~~; and
- c. assessing the patient's endothelial function based upon said monitoring.

Claim 2 (original): The method of claim 1, wherein providing a vasodilating stimulant comprises:

- a. compressing the patient's brachial artery for a predetermined period of time; and
- b. ceasing said compression after said predetermined period of time.

Claim 3 (currently amended): The method of claim 2, wherein said monitoring ~~further~~ comprises monitoring a change in temperature at one of the patient's fingertips.

Claim 4 (original): The method of claim 1, wherein providing a vasodilating stimulant comprises occluding blood flow in the patient's arm.

Claim 5 (withdrawn): The method of claim 4, wherein said monitoring comprises monitoring a change in temperature in the patient's arm.

Claim 6 (withdrawn): The method of claim 5, wherein monitoring the change in temperature in the patient's arm is accomplished by placing at least two temperature sensors proximate the patient's forearm.

Claim 7 (currently amended): The method of claim ~~6~~ 3, wherein the ~~temperature is monitored with at least one piezoelectric sensor~~ monitored temperature is plotted as a function of time.

Claim 8 (original): The method of claim 1, wherein the hemodynamic parameter is at least one of (i) blood temperature, (ii) blood oxygen content, or (iii) blood flow rate.

Claim 9 (withdrawn): The method of claim 1, wherein providing a vasodilating stimulant comprises occluding blood flow in the patient's leg.

Claim 10 (withdrawn): A method for measuring endothelial function, comprising:

- a. providing a vasodilating stimulant to a patient to stimulate hemodynamic activity in a selected region of the patient's body;
- b. monitoring a change in blood oxygen content at the selected region; and
- c. assessing the patient's endothelial function based upon said monitoring.

Claim 11 (withdrawn): The method of claim 10, wherein said monitoring is accomplished by taking measurements with a pulse oximeter.

Claim 12 (withdrawn): The method of claim 11, wherein said pulse oximeter is placed proximate the tip of one of the patient's fingers.

Claim 13 (original): A method for measuring endothelial function, comprising:

- a. providing a vasodilating stimulant to a patient ~~to stimulate and thereby stimulating~~ hemodynamic activity in a selected region of the patient's body;
- b. monitoring a change in blood flow rate at the selected region; and
- c. assessing the patient's endothelial function based upon said monitoring.

Claim 14 (withdrawn): The method of claim 13, wherein said monitoring is accomplished by taking measurements with a photoplethysmograph placed proximate one of the patient's fingers.

Claim 15 (withdrawn): The method of claim 13, wherein said monitoring is accomplished by taking an ultrasound Doppler measurement.

Claim 16 (original): The method of claim 13, wherein providing a vasodilating stimulant comprises:

- a. compressing one of the patient's arteries located in an outer extremity of the patient's body for a predetermined period of time; and
- b. ceasing said compression after said predetermined period of time.

Claim 17 (original): The method of claim 16, wherein the extremity is at least one of (i) a leg, (ii) an arm, (iii) a wrist, of (iv) a finger.

Claim 18 (original): The method of claim 17, wherein said monitoring occurs from a time prior to the beginning of said compression until a time after said ceasing when said blood flow has stabilized.

Claim 19 (original): The method of claim 18, further comprising plotting measured blood flow as a function of time.

Claim 20 (original): The method of claim 19, further comprising plotting the change in blood flow as a function of time.

Claim 21 (new): The method of claim 19, wherein the measured blood flow is monitored by temperature and the temperature is plotted as a function of time.

Claim 22 (new): A method for measuring endothelial function, comprising:

- a. providing a vasodilating stimulant to an arm of a patient, wherein the stimulant comprises occluding blood flow to the arm for a predetermined period of time; and ceasing the compression after the predetermined period of time;
- b. monitoring changes in blood flow as a consequence of the vasodilating stimulant by measuring temperature on a finger tip of the occluded arm from a time prior to the beginning of the occlusion until a time after ceasing of the compression when said blood flow has stabilized;
- c. plotting the measured temperature as a function of time; and
- d. assessing the patient's endothelial function based upon the monitoring.